

WHAT IS CLAIMED IS:

1. Expression vector pCT.1 as shown in Figure 1.
2. A method for isolating genes encoding proteins that regulate the expression of target genes of interest comprising the steps of:
 - a. modifying a target gene of interest such that it encodes the Cre recombinase and Herpes simplex virus (HSV) thymidine kinase (TK) proteins,
 - b. subjecting the modified target gene to mutagenesis and selecting for cells which have lost target gene expression by virtue of their resistance to ganciclovir which kills cells expressing HSV TK,
 - c. transiently transfecting with a cDNA library from the parent cell line in expression vector pCT.1 said cells that have lost target gene expression due to mutations in genes encoding *trans*-acting factors,
 - d. expressing in said transfected cells a cDNA that complements the genetic mutation that results in expression of the target gene and production of Cre recombinase which modifies pCT.1, and
 - e. isolating said modified pCT.1 from pCT.1 plasmids that do not activate target gene expression.